Cambridge Assessment International Education

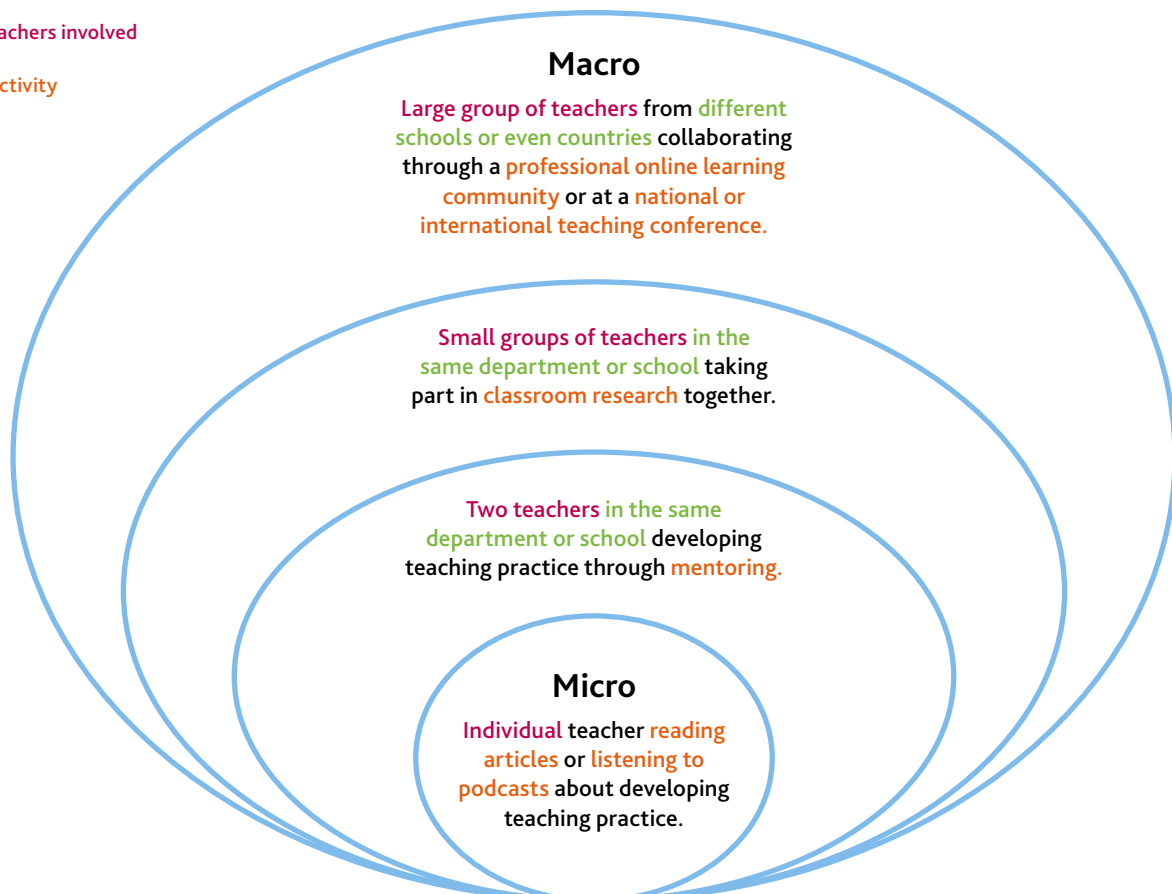# Education Brief: Teacher professional development

Teacher professional development involves a continuous process of reflection, learning and action to further a teacher's knowledge and skills, leading to enhanced teaching practices that positively impact on students' learning.

What does teacher professional development (PD) mean?

- Teacher PD aims to improve teachers and their practice by adopting a holistic approach to developing the teacher as a professional practitioner. It is an ongoing process that supports continuous development of practice throughout the whole of a teacher's career.

- Teaching practice comprises a range of areas, each of which can be targeted by PD activities. For example, in the TPACK model (Mishra and Koehler, 2006) three overlapping areas exist – Technological, Pedagogical and Content Knowledge. PD activities could therefore specifically target subject content knowledge or instead focus on subject-specific pedagogical knowledge (the overlapping areas of Pedagogical and Content Knowledge).

- Any activity that supports teachers to reflect, learn and then act to improve their practice can be classed as teacher PD, and such activities can occur in a face-to-face or online environment. Some examples are given in Figure 1.

- Teachers can engage in PD activities at the micro (individual) or macro level (collaborating with teachers across a range of contexts; Figure 1).

Figure 1: Micro to macro scale engagement with PD activities

Key:
Number of teachers involved
Context
Example PD activity

Macro
Large group of teachers from different schools or even countries collaborating through a professional online learning community or at a national or international teaching conference.

Small groups of teachers in the same department or school taking part in classroom research together.

Two teachers in the same department or school developing teaching practice through mentoring.

Micro
Individual teacher reading articles or listening to podcasts about developing teaching practice.

What other terms are associated with teacher PD?

Other terms commonly associated with teacher PD include:

- **Continuing professional development (CPD)** reinforces the notion that professionals should always develop their expertise and teaching practice.

- **Teacher (**or **professional) education** emphasises how engagement in educational experiences leads to learning, advancing a teacher's knowledge, skills and characteristics and enhancing their practice.

- **Training** often develops operational features of a role, focusing on accomplishing one specific skill, such as understanding how to teach a syllabus or how to write learning objectives.

- **Mentoring and coaching** are slightly different from one another. **Mentoring** focuses on establishing a supportive relationship where a less experienced teacher benefits from the guidance of a more experienced colleague (a 'critical friend'). **Coaching** is a technique that provides structured support to encourage a practitioner to review and develop their practice in relation to a specific skill or change in circumstance.

- A **professional learning community/network** brings practitioners together, enabling the sharing of ideas and experiences, as well as providing mutual support, either online or face to face.

- In **action research** teachers conduct research into their own practice with the aim of finding out how they might overcome a specific issue or problem associated with their practice.

What is the theory behind teacher PD?

- **The impact of teachers on learners:** Educational research indicates that teachers and their classroom actions play a large role in explaining variation in learner achievement (Creemers and Kyriakides, 2013). Therefore, effective teacher PD can positively impact teachers' practice and substantially improve learner outcomes.

- **Teachers as learners themselves:** Dylan Wiliam captured the notion of teachers as lifelong learners when he said: 'Every teacher needs to improve, not because they are not good enough, but because they can be even better'. Teachers' expertise can also be developed through formative feedback within a professional learning environment (Coe et al., 2020), echoing the social constructivism approaches to learning (Vygotsky, 1978) that teachers use with their own learners.

- **Engaging in reflection** is a fundamental aspect of teacher PD. By undertaking careful and deliberate critical analysis of classroom events and asking '*Why?*' to determine the reasons behind the events, teachers subsequently develop their practice and expertise, recognising what changes to practice to make in the future (Dewey, 1933; Schön, 1983; Tripp, 1993). Many models depict the cyclical nature of the reflection process: Kolb's Experiential Learning cycle (1984); Gibbs' Reflective Cycle (1988, Figure 2); Driscoll's 'What? So What? Now what?' cycle (2007); and Jasper's 'Experience, Reflection, Action (ERA)' cycle (2003).

Figure 2: Gibbs' Reflective Cycle
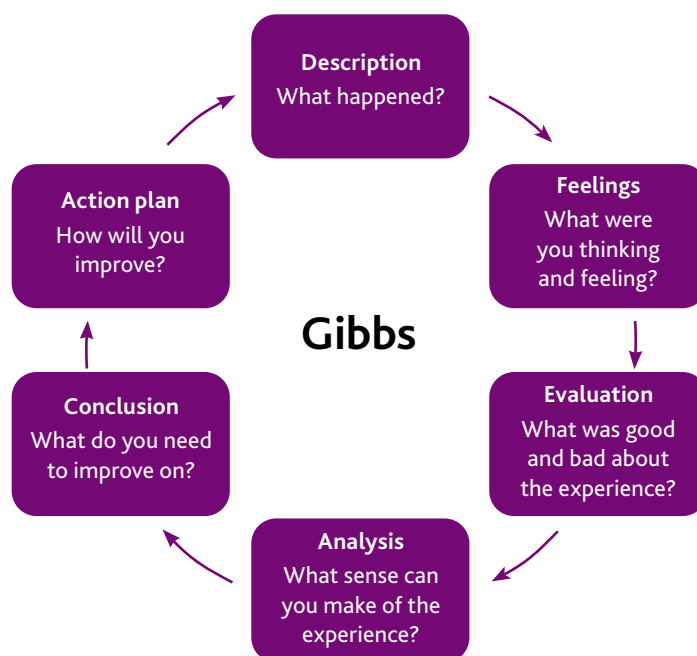
What are the benefits of teacher PD?

- **Improved learner outcomes:** Numerous research studies highlight the vital role that teachers play in securing learner outcomes (e.g. Creemers and Kyriakides, 2013; Hattie 2012). Teacher PD that is explicitly focused on improving learner outcomes has a significant impact on learner achievement (Cordingley et al., 2015). Therefore, by enhancing teachers' practice through effective PD opportunities, learner achievement will also improve.

- **Increased teacher motivation:** PD activities that provide teachers with a sense of agency and control over their professional development foster intrinsic motivation in teachers (Coe, 1998). Teachers also express higher job satisfaction when they have autonomy over their own PD (Worth and Van den Brande, 2020).

- **Benefits for schools and the sector:** When teachers engage in PD activity, individual schools and the school sector overall can benefit through:
  - the retention of teachers in the profession (Worth and Van den Brande, 2020).
  - an elevation of a school's reputation for effectively supporting learning as learner progress accelerates and outcomes improve.
  - enhancing a school's reputation as a place where staff are valued and supported to develop as professionals.
  - the wider sharing of best practice pedagogies for sector-wide improvement.

What are some of the misconceptions of teacher PD?

- **More experienced teachers cannot benefit from PD:** PD is a continuous process – teachers benefit from PD throughout, not just at the start of, their career. The number of years of teaching experience does not necessarily equate to expertise (Hattie, 2012) – it is also important for teachers to adapt teaching practices as educational contexts change (e.g. as a consequence of globalisation or emergency situations such as a pandemic) and to keep up to date with emerging pedagogical research and technological advances that inform effective teaching practices.

- **PD opportunities are one-off training events:** PD is more successful and leads to long-lasting and meaningful changes in teaching practice if it is contextualised and prolonged, with multiple opportunities for ongoing support and follow-up (Cordingley et al., 2015). Such a PD programme can be coordinated internally, externally, or through both means.

- **Passive engagement in PD is effective:** PD activities in which teachers remain passive recipients of knowledge and ideas rarely result in long-term changes in teacher practice (Cordingley et al., 2015). Teachers should instead have the opportunity to actively engage with new ideas and content, just as they would expect their learners to do, reflecting on how these apply to their own context.

- **PD takes lots of time for little impact:** PD should be embedded and integrated into a teacher's role, rather than considered as an extra activity. If implemented effectively, the time invested in PD will pay off. However, changing established ways of working commonly elicits both positive and negative emotional responses (e.g. Kelley and Conner, 1979), meaning that reflection cycles and a support network are vital to ensure that implementation of learning from PD activities occurs for long enough to see impact. We can use models such as the 'five levels of professional development evaluation' (Guskey, 1999) to help us gauge impact from participants' reaction to student learning outcomes.

- **PD is expensive:** Sometimes PD can be expensive but investing in high-quality PD programmes can elicit significant positive impact on teaching practices – make sure to invest in the most appropriate type of PD for your context and needs. Remember that free PD can also be impactful, for example, engaging with self-study guides in a reading group or being an active participant in learning communities through social media platforms.

- **Investing in teacher PD leads to loss of teachers:** Teachers gain job satisfaction through engaging with PD (Worth and Van den Brande, 2020) which in turn enhances their motivation. Therefore there is a danger that teachers who do not have the opportunity to engage in PD activities could leave their school, or even the profession.

Practical tips

How can schools support PD?

- **Actively demonstrate that teacher PD is valued in your school.**
  - Provide teachers with the resources that they need to engage in effective PD and for it to have impact, such as access to internal and external expertise and opportunities to follow up and consolidate learning.
  - Integrate PD into your teachers' roles and schedules, ensuring they can engage in PD activities regularly, rather than only when there is 'spare time'.
  - Elevate the status of PD in your school by formally recognising engagement with teacher PD, for example through teacher retention, promotion and remuneration.

- **Establish a collaborative learning culture** where opportunities for teachers to learn together – both within and beyond their school – are crafted and celebrated. This approach employs Vygotsky's (1978) social constructivism theory by allowing teachers to build understanding and progress in their learning by interacting with colleagues. Hattie (2016) also ranks collective teacher efficacy as having a very large positive impact on student achievement.

- **Reflect on your school context and teacher needs** to ensure that any PD activity will meet your teachers' and school's specific needs (Ellams, 2018). This keeps the PD relevant, meaning it is more likely to have impact.

- **Use the research evidence** to identify the most impactful areas to focus on for improving teaching practice and student learning in your school, for example Hattie's (2012) work on effect sizes, Creemers and Kyriakides' dynamic model of teacher effectiveness (2013), Rosenshine's (2010) 10 principles of instruction, and the Great Teaching Toolkit (Coe et al., 2020).

- **Remember quality assurance:** Cordingley et al. (2015) identified the key features of successful PD programmes, such as their ongoing nature, meeting teachers' specific needs and providing opportunities to put learning into practice in the classroom – remember these features when designing internal PD programmes. When sourcing external PD providers seek quality – do not be afraid to ask the provider how they will approach the PD programme and check it aligns with the research, such as tailoring of the PD offering to the needs of your teachers and school context. In both cases the school senior leadership team should collectively support the PD programme and teacher involvement with it.

How can teachers engage in PD?

- **Do not try to do everything at once.** Select one or two aspects of your practice to focus on developing and master these first before targeting further areas.

- **Seek guidance from evidence-informed sources** to identify teaching practices that are likely to strongly impact on your learners' learning (see the, '**Use the research evidence',** bullet point in the **How can schools support PD?** section above).

- **Take time to identify the existing strengths** in your practice – we can be overly critical of ourselves and focus only on areas of weakness. Try reflecting against recognised sets of teacher standards or seek feedback from colleagues. Keep doing the things you do well and get even better at them! Teachers with specific expertise are vital for supporting others to develop in these areas.

- **Identify areas for improvement:**
  - **Engage with colleagues** as sometimes we do not know what we do not know – often known as unconscious incompetence. A critical friend can help you to identify areas of your practice to improve.

  - **Ask yourself where most of your PD activity lies.** Do you mainly engage in PD on subject content knowledge? Do you tend to engage in individual PD activities at the micro level (see Figure 1)? Try broadening the types of PD activity you engage with to develop your practice more holistically.

- **Once you have identified one or two areas of focus, create an action plan.** Set specific goals and build in time to engage in reflective cycles to determine whether the changes to your practice are having an impact. Decide if you will share your progress with others, maybe through a mentor relationship or professional online learning community – this can help to keep you motivated.

- **Learn from your students!** Your learners are key stakeholders and a great source of information about what does (and does not) work well in your classroom. You can also get feedback from your learners (quick surveys, exit slips or short focus groups work well) and use this in your reflections to update your action plan.

How is Cambridge International supporting schools with teacher PD?

Our PD framework ensures all teachers and leaders have a wide variety of PD options to choose from to meet their experience level and specific needs. Our approach to PD reflects the principles outlined in this brief, supporting teachers to embody the Cambridge teacher and learner attributes: **confident, responsible, reflective, innovative** and **engaged.**

- Our **webpages** include numerous resources to support all Cambridge schools and their teachers. In particular, the Teaching Cambridge at your school webpage links to our Education Briefs, the Cambridge School Leader Standards and Cambridge Teacher Standards and self-assessment grids, and 'Getting Started with…' guides. The Getting Started with Evaluating Impact and Getting Started with Reflective Practice resources are particularly relevant for this brief.

- The **School Support Hub** is a secure online site for teachers at Cambridge schools, consisting of many thousands of high-quality teaching and learning resources, including schemes of work and learner guides.

- **Online and face-to-face professional development** events support teachers according to their experience and needs, with the offer comprising syllabus-based training, as well as Enrichment Professional Development.

- **Cambridge Professional Development Qualifications**, consisting of guided learning, individual study and collaborative learning, and school-based learning, help teachers develop their thinking and practice with expert guidance and support.

- We regularly hold **Cambridge Schools Conferences**, which include keynote speakers and workshops, and bring together Cambridge teachers and principals from across the globe.

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Where can you find more information?

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